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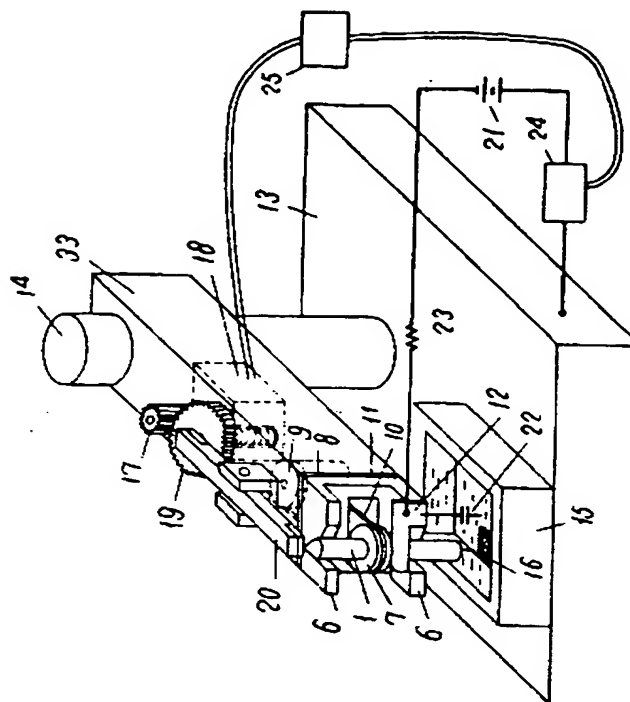
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INVENTOR : KAWADA KOICHI;

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TITLE : ELECTRIC DISCHARGE MACHINING  
DEVICE FOR FINE HOLE



ABSTRACT : PURPOSE: To improve machining speed, surface roughness and roundness when electric discharge machining a fine hole, by supporting a machining electrode with V-shaped grooved bearings and applying feed motion while giving rotary motion.

CONSTITUTION: A machining electrode 1 is supported by V-shaped groove bearings 6, and rotary motion of a motor 8 is transmitted by a pulley 7, belt 10 and pulley 9, further tension of the belt 10 applies force upward to the machining electrode 1. The machining electrode 1 and the like are insulated from a main unit 33 by an insulating material 11 and connected to a power source 21 by a brush 12. There are performed rough feed motion of the electrode 1 by the main unit 33 sliding along a strut 14 and fine feed motion by a fine feed mechanism constituted by a motor 18, pinion gear 17, feed screw 19 and lever 20. In this electric discharge machining method, a hole in a fine diameter of about 10~200 $\mu$ m can be well machined at high speed, in good surface roughness and roundness.

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